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PEPP Publications

The Clinic for Assessment of Youth at Risk (CAYR): 10 years of service delivery and research targeting the prevention of psychosis in Montreal, Canada.

Pruessner M, Faridi K, Shah J, Rabinovitch M, Iyer S, Abadi S, Pawliuk N, Joober R, Malla AK. *Early Interv Psychiatry*. 2017 Apr;11(2):177-184. doi: 10.1111/eip.12300. Epub 2015 Nov 23.

AIM: In the context of an increasing focus on indicated prevention of psychotic disorders, we describe the operation of the Clinic for Assessment of Youth at Risk (CAYR) over 10 years, a specialized service for identification, monitoring and treatment of young individuals who meet ultra-high risk (UHR) criteria for psychosis, and its integration within the Prevention and Early Intervention Program for Psychosis (PEPP) in Montreal, Canada.

METHODS: We outline rationale, development, inclusion and exclusion criteria, assessment, services offered, community outreach and liaison with potential referral sites, and our research focus on risk and protective factors related to the neural diathesis-stress model of psychosis.

RESULTS: Between January 2005 and December 2014, CAYR has received 370 referrals and accepted 177 patients who met UHR criteria based on the Comprehensive Assessment for At Risk Mental States. Conversion rates to a first episode of psychosis were 11%. Our research findings point to high subjective stress levels, poor self-esteem, social support and coping skills, and a dysregulation of the hypothalamus-pituitary-adrenal axis during the high-risk phase.

CONCLUSIONS: Our efforts at community outreach have resulted in increasing numbers of referrals and patients accepted to CAYR, highlighting the relevance of and need for a high-risk programme in the Montreal area. Patients with psychotic symptoms can be immediately assigned to the first-episode psychosis clinic within PEPP, which has likely contributed to the low conversion rates observed in the UHR group. Our research findings on stress and protective factors emphasize the importance of psychosocial interventions for high-risk patients.

High Risk

Prodrome or risk syndrome: what's in a name?

Geoffroy PA, Scott J.

Int J Bipolar Disord. 2017 Dec;5(1):7. doi: 10.1186/s40345-017-0077-5. Epub 2017 Apr 10.

BACKGROUND: In the last decade, an increasing number of publications have examined the precursors of bipolar disorders (BD) and attempted to clarify the early origins and illness trajectory. This is a complex task as the evolution of BD often shows greater heterogeneity than psychosis, and the first onset episode of BD may be dominated by depressive or manic features or both. To date, most of the published reviews have not clarified whether they are focused on prodromes, risk syndromes or addressing both phenomena. To assist in the interpretation of the findings from previous reviews and independent studies, this paper examines two concepts deemed critical to understanding the pre-onset phase of any mental disorder: prodromes and risk syndromes. The utility of these concepts to studies of the evolution of bipolar disorder (BD) is explored.

FINDINGS: The term "prodrome" is commonly used to describe the symptoms and signs that precede episode onset. If strictly defined, the term should only be applied retrospectively as it refers to cohorts of cases that all progress to meet diagnostic criteria for a specific disorder and gives insights into equifinality. Whilst prodromes may reliably predict individual relapses, the findings cannot necessarily be extrapolated to identify prospectively who will develop a first episode of a specific disorder from within a given population. In contrast, 'risk syndrome' is a term that encompasses sub-threshold symptom clusters, but has often been extended to include other putative risk factors such as family history, or other variables expressed continuously in the

population, such as personality traits. Only a minority of individuals 'at risk' make the transition to a specific mental disorder. By prospectively observing those cases where the risk syndrome does not progress to severe disorder or progress to a non-BD condition, we gain insights into the discriminant validity of different pre-BD characteristics, pluripotentiality of outcomes, and protective factors and resilience.

CONCLUSION: We emphasize the clinical and research utility of prodromes and risk syndromes, examine examples of the conflation of the concepts, and highlight the rationale for regarding them as discrete entities.

Impairment in Social Functioning differentiates youth meeting Ultra-High Risk for psychosis criteria from other mental health help-seekers: A validation of the Italian version of the Global Functioning: Social and Global Functioning: Role scales.

Lo Cascio N, Curto M, Pasqualetti P, Lindau JF, Girardi N, Saba R, Brandizzi M, Monducci E, Masillo A, Colafrancesco G, Solfanelli A, De Crescenzo F, Kotzalidis GD, Dario C, Ferrara M, Vicari S, Girardi P, Auther AM, Cornblatt BA, Correll CU, Fiori Nastro P.

Psychiatry Res. 2017 Apr 6;253:296-302. doi: 10.1016/j.psychres.2017.04.008. [Epub ahead of print]

Abstract: Social and occupational impairments are present in the schizophrenia prodrome, and poor social functioning predicts transition to psychosis in Ultra-High Risk (UHR) individuals. We aimed to: 1) validate the Italian version of the Global Functioning: Social (GF: S) and Global Functioning: Role (GF: R) scales; 2) evaluate their association with UHR criteria. Participants were 12-21-years-old (age, mean=15.2, standard deviation=2.1, male/female ratio=117/120) nonpsychotic help-seekers, meeting (N=39) or not (N=198) UHR criteria. Inter-rater reliability was excellent for both scales, which also showed good to excellent concurrent validity, as measured by correlation with Global Assessment of Functioning (GAF) scores. Furthermore, GF:S and GF: R were able to discriminate between UHRs and non-UHRs, with UHRs having lower current scores. After adjusting for current GAF scores, only current GF:S scores independently differentiated UHR from non-UHR (OR=1.33, 95%CI: 1.02-1.75, p=0.033). Finally, UHR participants showed a steeper decrease from highest GF:S and GF: R scores in the past year to their respective current scores, but not from highest past year GAF scores to current scores. GF:S/GF: R scores were not affected by age or sex. GF:S/GF: R are useful functional level and outcome measures, having the advantage over the GAF to not confound functioning with symptom severity. Additionally, the GF:S may be helpful in identifying UHR individuals.

Attachment styles and clinical correlates in people at ultra high risk for psychosis.

Russo DA, Stochl J, Hodgekins J, Iglesias-González M, Chipps P, Painter M, Jones PB, Perez J.

Br J Psychol. 2017 Apr 24. doi: 10.1111/bjop.12249. [Epub ahead of print]

Abstract: Evidence suggests that attachment styles may influence subclinical psychosis phenotypes (schizotypy) and affective disorders and may play a part in the association between psychosis and childhood adversity. However, the role of attachment in the initial stages of psychosis remains poorly understood. Our main aim was to describe and compare attachment styles in 60 individuals at ultra high risk for psychosis (UHR) and a matched sample of 60 healthy volunteers (HV). The HV had lower anxious and avoidant attachment scores than the UHR individuals ($p < .001$). Sixty-nine percentage of the UHR group had more than one DSM-IV diagnosis, mainly affective and anxiety disorders. The UHR group experienced more trauma ($p < .001$) and more mood and anxiety symptoms ($p < .001$). Interestingly, in our UHR group, only schizotypy paranoia was correlated with insecure attachment. In the HV group, depression,

anxiety, schizotypy paranoia, and social anxiety were correlated with insecure attachment. This difference and some discrepancies with previous studies involving UHR suggest that individuals at UHR may compose a heterogeneous group; some experience significant mood and/or anxiety symptoms that may not be explained by specific attachment styles. Nonetheless, measuring attachment in UHR individuals could help maximize therapeutic relationships to enhance recovery.

Substance Use

Specific impact of stimulant, alcohol and cannabis use disorders on first-episode psychosis: 2-year functional and symptomatic outcomes.

Ouellet-Plamondon C, Abdel-Baki A, Salvat É, Potvin S.

Psychol Med. 2017 Apr 20;1-11. doi: 10.1017/S0033291717000976. [Epub ahead of print]

BACKGROUND: Many studies have concluded that cannabis use disorder (CUD) negatively influences outcomes in first-episode psychosis (FEP). However, few have taken into account the impact of concurrent misuse of other substances.

METHODS: This 2-year, prospective, longitudinal study of FEP patients, aged between 18 and 30 years, admitted to early intervention programs in Montreal, Quebec, Canada, examined the specific influence of different substance use disorders (SUD) (alcohol, cannabis, cocaine, amphetamines) on service utilization, symptomatic and functional outcomes in FEP.

RESULTS: Drugs and alcohol were associated with lower functioning, but drugs had a greater negative impact on most measures at 2-year follow-up. Half of CUD patients and more than 65% of cocaine or amphetamine abusers presented polysubstance use disorder (poly-SUD). The only group that deteriorated from years 1 to 2 (symptoms and functioning) were patients with persistent CUD alone. Outcome was worse in CUD than in the no-SUD group at 2 years. Cocaine, amphetamines and poly-SUD were associated with worse symptomatic and functional outcomes from the 1st year of treatment, persisting over time with higher service utilization (hospitalization).

CONCLUSION: The negative impact attributed to CUD in previous studies could be partly attributed to methodological flaws, like including polysubstance abusers among cannabis misusers. However, our investigation confirmed the negative effect of CUD on outcome. Attention should be paid to persistent cannabis misusers, since their condition seems to worsen over time, and to cocaine and amphetamine misusers, in view of their poorer outcome early during follow-up and high service utilization.

Tobacco smoking and its association with cognition in first episode psychosis patients.

Hickling LM, Perez-Iglesias R, Ortiz-García de la Foz V, Balanzá-Martínez V, McGuire P, Crespo-Facorro B, Ayesa-Arriola R.

Schizophr Res. 2017 Apr 12. pii: S0920-9964(17)30205-0. doi: 10.1016/j.schres.2017.04.018. [Epub ahead of print]

Abstract: Available evidence suggests that nicotine may enhance cognitive functioning. Moreover, it has been suggested that the high prevalence of smoking in people with schizophrenia is in part due to self-medication behaviour to alleviate cognitive deficits. We assessed the association between tobacco smoking and cognitive functioning in a large population of first episode psychosis (FEP) patients (n=304) and healthy controls (n=156). Smokers were not tobacco deprived, or were minimally deprived (≤ 2 h). Verbal memory, visual memory, working memory, processing speed, executive function, motor dexterity and attention were assessed. The smoking prevalence among the FEP group was 57% (n=174). The age at which

patients began smoking cigarettes regularly was 16.2 years (SD=3.1), an average of 12 years before experiencing the first frank symptoms of psychosis (age of onset=28.8; SD=9.3). The number of cigarettes smoked per day was 19.6 (SD=9.4), significantly more than healthy controls [11.0 (SD=7.6); $p<0.001$]. ANCOVA analysis did not show any significant difference between smokers and non-smokers in the performance of any of the cognitive tasks in the FEP group or in the healthy control group, independent of gender, age, education or premorbid IQ. This suggests chronic exposure to nicotine through cigarette smoking is not associated with cognitive functioning in first-episode psychosis. These findings do not support the nicotine self-medication hypothesis as a contributor to the high prevalence of smoking among individuals suffering from serious mental illness.

Cannabis use, COMT, BDNF and age at first-episode psychosis.

Mané A, Bergé D, Penzol MJ, Parellada M, Bioque M, Lobo A, González-Pinto A, Corripio I, Cabrera B, Sánchez-Torres AM, Saiz-Ruiz J, Bernardo M, Group P.

Psychiatry Res. 2017 Apr;250:38-43. doi: 10.1016/j.psychres.2017.01.045. Epub 2017 Jan 19.

Abstract: Although an interaction between COMT Val158Met and BDNF Val66Met polymorphisms with cannabis use has been proposed with respect to the risk of psychosis emergence, findings remain inconclusive. The aim of the present study was to evaluate the different possible associations between these polymorphisms and early cannabis use and the age at the first episode of psychosis. The relationship between age at psychosis onset and COMT Val158Met and BDNF Val66Met polymorphisms with early cannabis use as well as those factors associated with early cannabis use were investigated. Among 260 Caucasian first-episode psychosis patients, early cannabis use and the presence of the met-allele from the BDNF Val66Met polymorphism were significantly associated with age at psychosis onset. Furthermore, early cannabis use was significantly associated with male gender in the logistic regression analysis. These findings provide evidence of the important role of early cannabis use and the Val66Met BDNF polymorphism on age at psychosis onset and they point out to sex-specific differences in cannabis use patterns.

Functional Outcome

Supported employment and education in comprehensive, integrated care for first episode psychosis: Effects on work, school, and disability income.

Rosenheck R, Mueser KT, Sint K, Lin H, Lynde DW, Glynn SM, Robinson DG, Schooler NR, Marcy P, Mohamed S, Kane JM.

Schizophr Res. 2017 Apr;182:120-128. doi: 10.1016/j.schres.2016.09.024. Epub 2016 Sep 23.

BACKGROUND: Participation in work and school are central objectives for first episode psychosis (FEP) programs, but evidence effectiveness has been mixed in studies not focused exclusively on supported employment and education (SEE). Requirements for current motivation to work or go to school limit the generalizability of such studies.

METHODS: FEP participants (N=404) at thirty-four community treatment clinics participated in a cluster randomized trial that compared usual Community Care (CC) to NAVIGATE, a comprehensive, team-based treatment program that included ≥ 5 h of SEE services per week, grounded in many of the principles of the Individual Placement and Support model of supported employment combined with supported education services. All study participants were offered SEE regardless of their initial interest in work or school. Monthly assessments over 24 months recorded days of employment and attendance at school, days of participation in SEE, and both employment and public support income (including disability income). General Estimation

Equation models were used to compare CC and NAVIGATE on work and school participation, employment and public support income, and the mediating effect of receiving ≥ 3 SEE visits on these outcomes.

RESULTS: NAVIGATE treatment was associated with a greater increase in participation in work or school ($p=0.0486$) and this difference appeared to be mediated by SEE. No group differences were observed in earnings or public support payments.

CONCLUSION: A comprehensive, team-based FEP treatment approach was associated with greater improvement in work or school participation, and this effect appears to be mediated, in part, by participation in SEE.

Incomes and Outcomes: Social Security Disability Benefits in First-Episode Psychosis.

Rosenheck RA, Estroff SE, Sint K, Lin H, Mueser KT, Robinson DG, Schooler NR, Marcy P, Kane JM; RAISE-ETP Investigators

Am J Psychiatry. 2017 Apr 21:appiajp201716111273. doi: 10.1176/appi.ajp.2017.16111273. [Epub ahead of print]

OBJECTIVE: Social Security Administration (SSA) disability benefits are an important source of income for people with psychoses and confer eligibility for health insurance. The authors examined the impact of coordinated specialty care on receipt of such benefits in first-episode psychosis, along with the correlates and consequences of receiving them.

METHOD: The Recovery After an Initial Schizophrenia Episode-Early Treatment Program (RAISE-ETP) study, a 34-site cluster-randomized trial, compared NAVIGATE, a coordinated specialty care program, to usual community care over 2 years. Receipt of SSA benefits and clinical outcomes were assessed at program entry and every 6 months for 2 years. Piecewise regression analysis was used to identify relative change in outcome trajectories after receipt of disability benefits.

RESULTS: Among 399 RAISE-ETP participants, 36 (9%) were receiving SSA disability benefits at baseline; of the remainder, 124 (34.1%) obtained benefits during the 2-year study period. The NAVIGATE intervention improved quality of life, symptoms, and employment but did not significantly reduce the likelihood of receiving SSA disability benefits. Obtaining benefits was predicted by more severe psychotic symptoms and greater dysfunction and was followed by increased total income but fewer days of employment, reduced motivation (e.g., sense of purpose, greater anhedonia), and fewer days of intoxication.

CONCLUSIONS: A 2-year coordinated specialty care intervention did not reduce receipt of SSA disability benefits. There were some advantages for those who obtained SSA disability benefits over the 2-year treatment period, but there were also some unintended adverse consequences. Providing income supports without impeding recovery remains an important policy challenge.

Preventing Unemployment and Disability Benefit Receipt Among People With Mental Illness: Evidence Review and Policy Significance.

O'Day B, Kleinman R, Fischer B, Morris E, Blyler C.

Psychiatr Rehabil J. 2017 Apr 3. doi: 10.1037/prj0000253. [Epub ahead of print]

OBJECTIVE: We identify effective services to assist 3 groups of people with mental illnesses become or remain employed and prevent dependence on disability cash benefits: (a) individuals, including youth, who are experiencing an initial episode of psychosis; (b) employed individuals at risk of losing jobs due to mental illness; and (c) individuals who are or may become long-term clients of mental health services and are likely to apply for disability benefits.

METHOD: We searched for articles published between 1992 and 2015 using key word terminology

related to employment support services and each subgroup, and prioritized articles by study design.

RESULTS: The individual placement and support model of supported employment is more effective than traditional vocational programs in helping people with serious mental illnesses who are engaged in treatment or receiving disability benefits obtain competitive employment. Some early intervention programs effectively serve people who experience a first episode of mental illness, but more research is needed to demonstrate long-term outcomes. Less is known about the effectiveness of employment interventions in preventing unemployment and use of disability benefits among individuals at risk for job loss or long-term mental illness.

CONCLUSIONS AND IMPLICATIONS FOR PRACTICE: States can fund employment supports to help prevent the need for disability benefit receipt by creatively combining federal sources, but the funding picture is imperfect. Medicaid expansion and other provisions of the Affordable Care Act may fund employment supports and assist in reducing dependence on disability benefits.

Dose reduction, relapse and functional recovery in first episode psychosis.

Killackey E.

Aust N Z J Psychiatry. 2017 Apr 1;48:67417700276. doi: 10.1177/0004867417700276. [Epub ahead of print] [no abstract]

Caregivers

Moderated Online Social Therapy: A Model for Reducing Stress in Carers of Young People Diagnosed with Mental Health Disorders.

Gleeson J, Lederman R, Koval P, Wadley G, Bendall S, Cotton S, Herrman H, Crisp K, Alvarez-Jimenez M.

Front Psychol. 2017 Apr 3;8:485. doi: 10.3389/fpsyg.2017.00485. eCollection 2017.

Abstract: Family members caring for a young person diagnosed with the onset of mental health problems face heightened stress, depression, and social isolation. Despite evidence for the effectiveness of family based interventions, sustaining access to specialist family interventions is a major challenge. The availability of the Internet provides possibilities to expand and sustain access to evidence-based psychoeducation and personal support for family members. In this paper we describe the therapeutic model and the components of our purpose-built moderated online social therapy (MOST) program for families. We outline the background to its development, beginning with our face-to-face EPISODE II family intervention, which informed our selection of therapeutic content, and the integration of recent developments in positive psychology. Our online interventions for carers integrate online therapy, online social networking, peer and expert support, and online social problem solving which has been designed to reduce stress in carers. The initial version of our application entitled Meridian was shown to be safe, acceptable, and feasible in a feasibility study of carers of youth diagnosed with depression and anxiety. There was a significant reduction in self-reported levels of stress in caregivers and change in stress was significantly correlated with use of the system. We have subsequently launched a cluster RCT for caregivers with a relative diagnosed with first-episode psychosis. Our intervention has the potential to improve access to effective specialist support for families facing the onset of serious mental health problems in their young relative.

Effectiveness of family interventions on psychological distress and expressed emotion in family members of individuals diagnosed with first-episode psychosis: a systematic review.

Napa W, Tungpunkom P, Pothimas N.

JBI Database System Rev Implement Rep. 2017 Apr;15(4):1057-1079. doi: 10.11124/

JBISRIR-2017-003361.

BACKGROUND: A critical period for persons with first-episode psychosis is the first two years after diagnosis, when they are at high risk of suicide attempts, violent behaviors and substance abuse. This period also has a great impact on the psychological distress of family members, particularly caregivers who either provide care or live with ill family members. In addition, the families also report feelings of being overwhelmed when accessing service facilities at this critical point. These consequences impact on the affective tone/atmosphere in the family, also referred to as so-called expressed emotion. In addition, expressed emotion research has indicated that the family atmosphere contributes to recurrent psychosis and lengthy hospital stays for patients in the initial phase. Therefore, family interventions aimed at reducing psychological distress and improving expressed emotion in families during this critical time are very important. Modern research has yielded international evidence addressing these outcomes, but little is known about which interventions are the most effective. Therefore, this review aimed to evaluate the effectiveness of these interventions.

OBJECTIVES: The objective of this review was to examine the effectiveness of family interventions on psychological distress and expressed emotion in family members of persons with first-episode psychosis (FEP).

INCLUSION CRITERIA TYPES OF PARTICIPANTS: Family members of persons with FEP and who had received treatment after being diagnosed within two years.

TYPES OF INTERVENTION(S): Studies that examined interventions among family members of persons with FEP. Family interventions referred to any education, psychoeducation, communication, coping and problem-solving skills training and cognitive behavioral therapy that was provided to family members of persons with FEP.

OUTCOMES: Psychological distress and expressed emotions of those family members.

TYPES OF STUDIES: Randomized controlled trials, quasi-experimental studies, cohort studies and case-control studies.

SEARCH STRATEGY: The preliminary search was conducted in MEDLINE and CINAHL with keywords containing the title, abstract and subject description analysis as the first identification of related studies. An extensive search was conducted in other databases including ProQuest Dissertations and Theses, ScienceDirect, Scopus, PsychINFO, ThaiLIS and Thai National research databases. In addition, searches of reference lists and other manual searches were undertaken.

METHODOLOGICAL QUALITY: Studies were critically appraised by two independent reviewers for methodological validity prior to inclusion in the review using standardized critical appraisal instruments from the Joanna Briggs Institute.

DATA EXTRACTION: Data were extracted using the standardized data extraction tools from the Joanna Briggs Institute. The mean score and standard deviation (SD) were extracted for targets outcomes relating to psychological distress and expressed emotion.

DATA SYNTHESIS: Quantitative data could not be pooled due to the heterogeneity of the included studies. Data were synthesized based on the individual results from the three included studies and have been presented in a narrative format accompanied with tabulated data.

RESULTS: Data synthesis of the three individual studies indicated that there were no statistically significant interventions that address psychological distress and expressed emotion in family members who live with and care for persons with FEP. There is insufficient evidence available to evaluate the effect sizes for pooled outcomes.

CONCLUSION: Based on the results of this review, there is insufficient evidence to validate the effectiveness of family interventions on psychological distress and expressed emotion in family members who live with and care for persons with FEP. In addition, based on the individual primary studies, the implications for practice should be carefully considered.

Distress & Dysphoria

Depressive symptoms and suicidal behavior after first-episode psychosis: A comprehensive systematic review.

Coentre R, Talina MC, Góis C, Figueira ML.

Psychiatry Res. 2017 Apr 5;253:240-248. doi: 10.1016/j.psychres.2017.04.010. [Epub ahead of print]

Abstract: Depressive symptoms and suicidal behavior are common among patients that suffered a first-episode psychosis. We searched Web of KnowledgeSM and Pubmed[®] for English and Portuguese original articles investigating prevalence of depressive symptoms and/or suicidal behavior and associated factors after first-episode psychosis. We included 19 studies from 12 countries, 7 studied depressive symptoms and 12 suicidal behavior. The findings confirm that depressive symptoms and suicidal behavior have high rates in the years after first-episode psychosis. Factors identified as being associated with depressive symptoms after first-episode psychosis were anomalies of psychosocial development, poor premorbid childhood adjustment, greater insight, loss, shame, low level of continuing positive symptoms and longer duration of untreated psychosis. Suicidal behavior was associated with previous suicide attempt, sexual abuse, comorbid polysubstance use, lower baseline functioning, longer time in treatment, recent negative events, older patients, longer duration of untreated psychosis, higher positive and negative psychotic symptoms, family history of severe mental disorder, substance use, depressive symptoms and cannabis use. Data also indicate that treatment and early intervention programs reduce depressive symptoms and suicidal behavior after first-episode psychosis. Future research should overcome some methodological discrepancies that exist between studies and limit generalization of current findings.

“What is the point of life?”: An interpretative phenomenological analysis of suicide in young men with first-episode psychosis.

Gajwani R, Larkin M, Jackson C.

Early Interv Psychiatry. 2017 Apr 18. doi: 10.1111/eip.12425. [Epub ahead of print]

BACKGROUND: Lifetime risk of suicide in first-episode psychosis far exceeds the general population, with the risk of suicide persisting long after first presentation. There is strong evidence to suggest that women more frequently attempt suicide, while men are at a greater risk of completing suicide. First-hand experiential evidence is needed in order to better understand men’s motives for, and struggles with, suicidality in early psychosis.

METHODS: Semi-structured interviews were conducted with 7 participants. The interviews explored each respondent’s account of their suicide attempt within the broader context of their life, in relation to their past, present and future. In line with the exploratory, inductive nature of the study, an Interpretative Phenomenological Analysis was used to explore the meaning of suicide attempts in these accounts.

RESULTS: Three super-ordinate themes emerged: Self-as-vulnerable (intra- and inter-personal relationships), appraisal of cumulative life events as unbearable and meaning of recovery marked by shared sense of hope and imagery for the future.

CONCLUSIONS: Young men in the early stages of their treatment are seeking to find meaning for frightening, intrusive experiences with origins which often precede psychosis. These experiences permeate personal identity, relationships and recovery. Suicide was perceived as an escape from this conundrum, and was pursued angrily and impulsively. By contrast, the attainment of hope was marked by sharing one's burden and finding a sense of belonging. Specialized assertive outreach programmes may be beneficial in improving the social inclusion of young men who may be particularly marginalized.

The associations between quality of life and clinical symptoms in individuals with an at-risk mental state and first-episode psychosis.

Ohmuro N, Matsumoto K, Ishii Y, Katsura M, Obara C, Kikuchi T, Hamaie Y, Ito F, Matsuoka H. *Psychiatry Res.* 2017 Apr 19;254:54-59. doi: 10.1016/j.psychres.2017.04.031. [Epub ahead of print]

Abstract: Quality of life (QOL) is strongly associated with severity of clinical symptoms and is often compromised in patients with chronic or first-episode psychosis (FEP). However, it remains unclear whether baseline QOL in individuals with an at-risk mental state (ARMS) for psychosis is higher or lower than that in patients with FEP, or what specific clinical symptoms relate to a decreased QOL in individuals with ARMS and FEP. The World Health Organization's WHOQOL-BREF, an instrument assessing QOL, was administered to 104 individuals with ARMS and 53 with FEP. Clinical symptoms were assessed by the Positive and Negative Syndrome Scale and the Beck Depression Inventory-II. We compared the four domain scores of the WHOQOL-BREF between the two groups, and calculated Pearson correlations between each WHOQOL-BREF domain score and the clinical symptoms and compared these correlations between the groups. We observed significant correlations between poor QOL and severity of depressive symptoms in both the FEP and ARMS group. No between-group differences were found in any correlation coefficients between WHOQOL-BREF domains and clinical symptoms. Thus, depressive symptoms should be investigated as a key factor relating to poor QOL in both individuals with ARMS and those with FEP.

Coping and the stages of psychosis: an investigation into the coping styles in people at risk of psychosis, in people with first-episode and multiple-episode psychoses.

Kommesch M, Gross S, Pützelfeld V, Klosterkötter J, Bechdolf A.

Early Interv Psychiatry. 2017 Apr;11(2):147-155. doi: 10.1111/eip.12223. Epub 2015 Feb 26.

AIM: The concept of coping is central to recent models of psychosis. The aim of the present paper is to explore whether specific coping styles relate to certain stages of the disorder.

METHODS: Thirty-nine clients at clinical high risk (CHR) of first-episode psychosis, 19 clients with first-episode psychosis and 52 clients with multiple-episode psychosis completed a Stress Coping Questionnaire. This questionnaire consists of 114 items defining one overall positive coping scale (with three subscales) and one negative coping scale. Analyses of variance with group as between-subject factor and coping behaviour as within-subject factor were used to identify different coping patterns.

RESULTS: On the level of subscales no group differences could be detected, but analysis of variance revealed slightly different patterns: CHR clients used significantly more negative than positive coping styles ($P = 0.001$), followed by patients with multiple-episode psychosis ($P = 0.074$). First-episode patients were most likely to use negative as well as positive coping ($P = 0.960$). Across all stages of illness, stress control was significantly preferred compared to the other positive coping styles distraction and devaluation. Again, this pattern was especially pronounced for at-risk clients and patients with multiple-episode psychosis, whereas patients with first-episode psychosis were

most likely to use devaluation as well as distraction.

CONCLUSIONS: The overall coping styles were similar across the different stages of psychosis. However, at-risk persons presented especially pronounced negative coping and a small range of strategies, indicating a specific need for psychosocial support in this stage of the disorder.

Distress, Psychotic Symptom Exacerbation, and Relief in Reaction to Talking about Trauma in the Context of Beneficial Trauma Therapy: Perspectives from Young People with Post-Traumatic Stress Disorder and First Episode Psychosis.

Tong J, Simpson K, Alvarez-Jimenez M, Bendall S.

Behav Cogn Psychother. 2017 Apr 24:1-16. doi: 10.1017/S1352465817000236. [Epub ahead of print]

BACKGROUND: Of young people with first episode psychosis (FEP), over half report exposure to childhood trauma and consequent co-morbid post-traumatic stress disorder (PTSD) or symptoms. Currently no evidence-based interventions exist for PTSD in FEP. Clinicians report concerns that trauma-focused interventions with young people with FEP could result in distress and symptom exacerbation. Scant research suggests that talking about trauma in therapy can be distressing for some people.

AIMS: To explore young people's reactions to a trauma-focused treatment for PTSD in FEP.

METHOD: Semi-structured interviews were conducted with eight participants (age 18-27 years) with co-morbid PTSD and FEP, after completing a trauma-focused intervention. Transcripts were analysed using an interpretative phenomenological approach. Participants' baseline and end-of-treatment PTSD and psychotic symptoms were assessed.

RESULTS: Three themes related to participants' reactions were identified from the analysis: (1) distress in session; (2) feeling relieved in and out of session; and (3) symptom exacerbation out of session. All but one participant reported experiencing increased distress in session. Four participants described PTSD, psychotic symptoms and/or suicidal ideation worsening in immediate reaction to talking about trauma in therapy sessions. 86% of participants showed improvement in their PTSD and psychotic symptoms at end of treatment. All participants described the intervention as beneficial and worthwhile.

CONCLUSIONS: Results suggest that feelings of distress are to be expected from individuals with PTSD and FEP during trauma-focused treatment. Psychotic and PTSD symptom exacerbation can occur in PTSD treatment in FEP. Clinicians should be aware of, plan for, and clearly inform their clients of treatment risks.

Intervention

Schizophrenia and Psychosis: Diagnosis, Current Research Trends, and Model Treatment Approaches with Implications for Transitional Age Youth.

Chan V.

Child Adolesc Psychiatr Clin N Am. 2017 Apr;26(2):341-366. doi: 10.1016/j.chc.2016.12.014.

Abstract: This article reviews the current state of diagnosis and treatment of schizophrenia, describing the recent proliferation of research in high-risk psychosis spectrum conditions, which are different from childhood-onset and early onset schizophrenia, and findings of psychotic-like experiences in the normal population. Taken from adult and childhood literature, clinical quandaries in accurate diagnosis, and treatment gaps in co-occurring, or sometimes confounding, conditions are discussed. Thoughts on the impact of schizophrenia on an emerging adulthood trajectory are offered. Recent best practices in the treatment of schizophrenia are consistent with a recovery-oriented model of mental health services for transitional age youth.

Innovations in first episode psychosis interventions: The case for a “RAISE-Plus” approach.

Kline E, Keshavan M.

Schizophr Res. 2017 Apr;182:2-3. doi: 10.1016/j.schres.2017.03.035. Epub 2017 Mar 17.

Abstract: Several papers in the current issue of Schizophrenia Research show evidence supporting interventions that are not yet grouped with standard care practices in FEP. Taken together, these studies make the case for a more inclusive approach for early psychosis care than what is embodied in RAISE. Although providing all interventions to all patients, however, will be impractical and expensive, a personalized approach to such interventions, whereby the appropriate interventions are implemented in a phase specific and individually tailored manner after a careful assessment of each person's core deficits within a coordinated specialty care model, is likely to improve lives and be cost-effective.

OnTrackNY: The Development of a Coordinated Specialty Care Program for Individuals Experiencing Early Psychosis.

Bello I, Lee R, Malinovsky I, Watkins L, Nossel I, Smith T, Ngo H, Birnbaum M, Marino L, Sederer LI, Radigan M, Gu G, Essock S, Dixon LB.

Psychiatr Serv. 2017 Apr 1;68(4):318-320. doi: 10.1176/appi.ps.201600512. Epub 2016 Dec 15.

Abstract: OnTrackNY is a coordinated specialty care program that delivers early intervention services to youths experiencing a first episode of nonaffective psychosis. Treatment aims to help individuals improve their mental health and achieve personal goals related to work, school, and social relationships. This column describes OnTrackNY's progression from a research project to real-world implementation. The authors describe the treatment model, approach to training and dissemination, and procedures for collecting and sharing data with OnTrackNY teams and provide data on client characteristics and selected outcomes.

Sustainability of treatment effect of a 3-year early intervention programme for first-episode psychosis.

Chang WC, Kwong VW, Lau ES, So HC, Wong CS, Chan GH, Jim OT, Hui CL, Chan SK, Lee EH, Chen EY.

Br J Psychiatry. 2017 Apr 6. pii: bjp.bp.117.198929. doi: 10.1192/bjp.bp.117.198929. [Epub ahead of print]

BACKGROUND: Evidence indicates that the positive effects of 2-year early intervention services for psychosis are not maintained after service withdrawal. Optimal duration of early intervention in sustaining initial improved outcomes remains to be determined.

AIMS: To examine the sustainability of the positive effects of an extended, 3-year, early intervention program for patients with first-episode psychosis (FEP) after transition to standard care.

METHOD: A total of 160 patients, who had received a 2-year early intervention program for FEP, were enrolled to a 12-month randomized-controlled trial (ClinicalTrials.gov: NCT01202357) comparing a 1-year extension of the early intervention (3-year specialized treatment) with step-down care (2-year specialized treatment). Participants were followed up and reassessed 2 and 3 years after inclusion to the trial.

RESULTS: There were no significant differences between the treatment groups in outcomes on functioning, symptom severity and service use during the 2-year post-trial follow-up period.

CONCLUSIONS: The therapeutic benefits achieved by the extended, 3-year early intervention were not sustainable after termination of the specialized service.

Medication

Antipsychotic treatment resistance in first-episode psychosis: prevalence, subtypes and predictors.

Demjaha A, Lappin JM, Stahl D, Patel MX, MacCabe JH, Howes OD, Heslin M, Reininghaus UA, Donoghue K, Lomas B, Charalambides M, Onyejiaka A, Fearon P, Jones P, Doody G, Morgan C, Dazzan P, Murray RM.

Psychol Med. 2017 Apr 11:1-9. doi: 10.1017/S0033291717000435. [Epub ahead of print]

BACKGROUND: We examined longitudinally the course and predictors of treatment resistance in a large cohort of first-episode psychosis (FEP) patients from initiation of antipsychotic treatment. We hypothesized that antipsychotic treatment resistance is: (a) present at illness onset; and (b) differentially associated with clinical and demographic factors.

METHOD: The study sample comprised 323 FEP patients who were studied at first contact and at 10-year follow-up. We collated clinical information on severity of symptoms, antipsychotic medication and treatment adherence during the follow-up period to determine the presence, course and predictors of treatment resistance.

RESULTS: From the 23% of the patients, who were treatment resistant, 84% were treatment resistant from illness onset. Multivariable regression analysis revealed that diagnosis of schizophrenia, negative symptoms, younger age at onset, and longer duration of untreated psychosis predicted treatment resistance from illness onset.

CONCLUSIONS: The striking majority of treatment-resistant patients do not respond to first-line antipsychotic treatment even at time of FEP. Clinicians must be alert to this subgroup of patients and consider clozapine treatment as early as possible during the first presentation of psychosis.

Antipsychotic medication and remission of psychotic symptoms 10 years after a first-episode psychosis.

Wils RS, Gotfredsen DR, Hjorthøj C, Austin SF, Albert N, Secher RG, Thorup AA, Mors O, Nordentoft M. Schizophr Res. 2017 Apr;182:42-48. doi: 10.1016/j.schres.2016.10.030. Epub 2016 Oct 27.

BACKGROUND: Several national guidelines recommend continuous use of antipsychotic medication after a psychotic episode in order to minimize the risk of relapse. However some studies have identified a subgroup of patients who obtain remission of psychotic symptoms while not being on antipsychotic medication for a period of time. This study investigated the long-term outcome and characteristics of patients in remission of psychotic symptoms with no use of antipsychotic medication at the 10-year follow-up.

METHODS: The study was a cohort study including 496 patients diagnosed with schizophrenia spectrum disorders (ICD 10: F20 and F22-29). Patients were included in the Danish OPUS Trial and followed up 10 years after inclusion, where patient data was collected on socio-demographic factors, psychopathology, level of functioning and medication.

FINDINGS: 61% of the patients from the original cohort attended the 10-year follow up and 30% of these had remission of psychotic symptoms at the time of the 10-year follow up with no current use of antipsychotic medication. This outcome was associated with female gender, high GAF-F score, participation in the labour market and absence of substance abuse.

CONCLUSION: Our results describe a subgroup of patients who obtained remission while not being on antipsychotic medication at the 10-year follow-up. The finding calls for further investigation on a more individualized approach to long-term treatment with antipsychotic medication.

Stability and development of psychotic symptoms and the use of antipsychotic medication - long-term follow-up.

Gotfredsen DR, Wils RS, Hjorthøj C, Austin SF, Albert N, Secher RG, Thorup AA, Mors O, Nordentoft M. *Psychol Med.* 2017 Apr 6:1-12. doi: 10.1017/S0033291717000563. [Epub ahead of print]

BACKGROUND: Few studies have evaluated the development in the use of antipsychotic medication and psychotic symptoms in patients with first-episode psychosis on a long-term basis. Our objective was to investigate how psychotic symptoms and the use of antipsychotic medication changed over a 10-year period in a cohort of patients with first-episode psychosis.

METHOD: The study is a longitudinal prospective cohort study over 10 years with follow-ups at years 1, 2, 5 and 10. A total of 496 patients with first-episode psychosis were included in a multi-centre study initiated between 1998 and 2000 in Copenhagen and Aarhus, Denmark.

RESULTS: At all follow-ups, a large proportion (20-30%) of patients had remission of psychotic symptoms without use of antipsychotic medication at the time of the follow-up. Patients who were in this group at the 5-year follow-up had an 87% [95% confidence interval (CI) 77-96%] chance of being in the same group at the 10-year follow-up. This stability was also the case for patients who had psychotic symptoms and were treated with antipsychotic medication at year 5, where there was a 67% (95% CI 56-78%) probability of being in this group at the consecutive follow-up.

CONCLUSIONS: A large group of patients with psychotic illness were in remission without the use of antipsychotic medication, peaking at year 10. Overall there was a large degree of stability in disease courses over the 10-year period. These results suggest that the long-term outcome of psychotic illness is heterogeneous and further investigation on a more individualized approach to long-term treatment is needed.

Other

Further evidence of a cumulative effect of social disadvantage on risk of psychosis.

Stilo SA, Gayer-Anderson C, Beards S, Hubbard K, Onyejiaka A, Keraite A, Borges S, Mondelli V, Dazzan P, Pariante C, Di Forti M, Murray RM, Morgan C.

Psychol Med. 2017 Apr;47(5):913-924. doi: 10.1017/S0033291716002993. Epub 2016 Dec 5.

BACKGROUND: A growing body of evidence suggests that indicators of social disadvantage are associated with an increased risk of psychosis. However, only a few studies have specifically looked at cumulative effects and long-term associations. The aims of this study are: To compare the prevalence of specific indicators of social disadvantage at, and prior to, first contact with psychiatric services in patients suffering their first episode of psychosis and in a control sample. To explore long-term associations, cumulative effects, and direction of effects.

METHOD: We collected information on social disadvantage from 332 patients and from 301 controls recruited from the local population in South London. Three indicators of social disadvantage in childhood and six indicators of social disadvantage in adulthood were analyzed.

RESULTS: Across all the domains considered, cases were more likely to report social disadvantage than were controls. Compared with controls, cases were approximately two times more likely to have had a parent die and approximately three times more likely to have experienced a long-term separation from one parent before the age of 17 years. Cases were also more likely than controls to report two or more indicators of adult social disadvantage, not only at first contact with psychiatric services [odds ratio (OR) 9.5], but also at onset of psychosis (OR 8.5), 1 year pre-onset (OR 4.5), and 5 years pre-onset (OR 2.9).

CONCLUSIONS: Greater numbers of indicators of current and long-term exposure are associated with progressively greater odds of psychosis. There is some evidence that social disadvantage tends to cluster and accumulate.

Impact of crime victimization on initial presentation to an early intervention for psychosis service and 18-month outcomes.

Fisher HL, Roberts A, Day F, Reynolds N, Iacoponi E, Garety PA, Craig TK, McGuire P, Valmaggia L, Power P.

Early Interv Psychiatry. 2017 Apr;11(2):123-132. doi: 10.1111/eip.12219. Epub 2015 Jan 13.

AIM: To investigate the clinical and social correlates of a lifetime history of crime victimization among first-episode psychosis patients at entry to an Early Intervention Service and following 18 months of specialist care.

METHODS: Face-to-face interviews were conducted with 149 individuals who presented to an Early Intervention Service for the first time with psychosis in the London borough of Lambeth, UK. A range of demographic and clinical measures were completed including self-reported history of victimization along with the type of crime and its subjective effect on the patient. Clinical and functional outcomes at 18-month follow up were ascertained from clinical case notes by a psychiatrist.

RESULTS: A large proportion of patients (n = 64, 43%) reported a history of crime victimization. This was associated with significantly higher levels of depression and substance misuse at initial presentation. Being a victim of a crime was not significantly associated with poorer clinical or functional outcomes after 18 months of specialist care. However, non-significant differences were found for those who reported crime victimization in terms of their increased use of illegal substances or having assaulted someone else during the follow-up period.

CONCLUSION: Past experience of being a victim of crime appears to be common in patients presenting for the first time with psychosis and is associated with increased likelihood of comorbidity. Thus, Early Intervention Services should consider screening for past victimization and be prepared to deal with comorbid problems. The impact of crime victimization on clinical and functional outcomes requires investigation over a longer period of time.

Early clinical recovery in first-episode psychosis: Symptomatic remission and its correlates at 1-year follow-up.

Simonsen C, Faerden A, Romm KL, Berg AO, Bjella T, Sundet K, Ueland T, Andreassen O, Melle I.

Psychiatry Res. 2017 Apr 24;254:118-125. doi: 10.1016/j.psychres.2017.04.050. [Epub ahead of print]

Abstract: The aim was to gain more knowledge about early clinical recovery in first-episode psychosis (FEP). The interrelationship between symptomatic remission, poor global functioning and neurocognitive impairment was investigated. FEP participants (n =91) from the TOP study were investigated at baseline and 1-year follow-up. Symptomatic remission was defined by internationally standardized criteria. Poor global functioning was defined as GAF-F score ≤ 60 . Neurocognitive impairment was defined as 1.5 standard deviation below healthy controls on a neuropsychological composite score. Finally, early clinical recovery was defined as symptomatic remission during the last 6 months and functional remission (1. GAF-F score ≥ 61 , 2. at least 50% study/employment, and 3. living independently). At 1-year follow-up 26% were in symptomatic remission, predicted by duration of untreated psychosis and baseline positive symptoms. Significantly fewer in the symptomatic remission group had poor global functioning compared to the non-remission group, with no difference in the rate of neurocognitive impairment. Finally, 14% were considered in early clinical recovery. They had the same rate of neurocognitive impairment

as the remaining group. These findings imply that symptomatic remission and early clinical recovery can already be identified at 1-year follow-up, and that this is relatively independent of neurocognitive impairment.

Social cognition and the course of social functioning in first-episode psychosis.

Woolverton CB, Bell EK, Moe AM, Harrison-Monroe P, Breitborde NJ.

Early Interv Psychiatry. 2017 Apr 12. doi: 10.1111/eip.12432. [Epub ahead of print]

BACKGROUND: Social functioning deficits greatly affect individuals with psychotic disorders resulting in decreased ability to maintain relationships, jobs and pursuit of educational goals. Deficits in social cognition have been hypothesized to be an important contributor to these deficits in social functioning. In particular, 5 domains of social cognition have been suggested to be relevant in the study of psychotic disorders: (1) attributional style, (2) emotion recognition, (3) social knowledge, (4) social perception and (5) theory of mind. Yet, to date, no study has simultaneously investigated the association between these 5 domains of social cognition and social functioning.

METHODS: We investigated the cross-section and longitudinal association between social cognition and social functioning among 71 individuals with first-episode psychosis.

RESULTS: We found modest cross-sectional associations between social cognition and social functioning that were often in the unexpected direction (ie, greater social cognition associated with worse social functioning). Social cognition at baseline was not associated with the longitudinal course of social functioning.

CONCLUSIONS: These unexpected findings fail to align with previous research that has documented a more robust relationship between these 2 constructs, and raise critical questions with regard to the nature of the association between social cognition and social functioning among individuals with first-episode psychosis.

The course of cognitive functioning after first-episode of psychosis: A six month follow-up study.

Haring L, Möttus R, Kajalaid K, Koch K, Uppin K, Maron E, Vasar E.

Schizophr Res. 2017 Apr;182:31-41. doi: 10.1016/j.schres.2016.10.017. Epub 2016 Oct 13.

Abstract: Our aim with the present study was to evaluate rank-order and mean-level cognitive functioning stability among first-episode psychosis (FEP) patients, measured using the Cambridge Neuropsychological Test Automated Battery (CANTAB), over a six month period. We also aimed to examine longitudinal measurement invariance and identify factors-such as age, gender, educational level, treatment and psychopathological change scores-potentially linked to cognitive change among patients. In addition, correlations between objectively measured and subjectively evaluated cognitive functioning were estimated. Neuropsychological assessments were administered to 85 patients after the initial stabilisation of their psychosis; 82 of the patients were retested. Subjectively perceived cognitive functioning was measured using a subscale derived from the Estonian version of the Subjective Well-Being Under Neuroleptic Scale (SWN-K-E). On average, executive functioning and processing speed improved significantly, while memory test scores decreased significantly, over time. Very high rank-order stability ($r=0.80$ to 0.94 , $p<0.001$) was observed with all measured ability scores. Confirmatory factor analysis revealed the loadings of a single (broad ability) factor model were equal across both measurement occasions, but the lack of intercept invariance suggested that mean-level comparisons are more appropriately carried out at a subtest level. On average psychopathology scores and antipsychotics doses declined over time, with the latter also significantly correlating with better

executive functioning. Gender was a significant moderator of some domains of cognitive performance, and decline tended to be somewhat more pronounced for women. The results also indicated the lack of any relationship between objective and subjective measurements of cognitive functioning.